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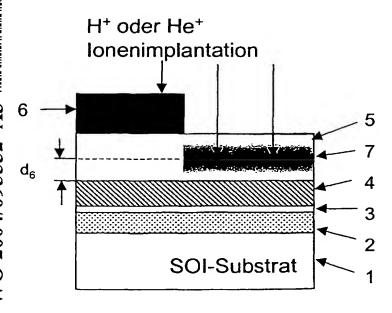
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[Fortsetzung auf der nächsten Seite]

(54) Title: METHOD FOR PRODUCING A TENSIONED LAYER ON A SUBSTRATE, AND A LAYER STRUCTURE

(54) Bezeichnung: VERFAHREN ZUR HERSTELLUNG EINER VERSPANNTEN SCHICHT AUF EINEM SUBSTRAT UND SCHICHTSTRUKTUR



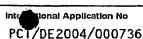
- (57) Abstract: The invention relates to a method for producing a tensioned layer on a substrate involving the following steps: producing a defect area in a layer adjacent to the layer to be tensioned, and; relaxing at least one layer adjacent to the layer to be tensioned. Additional layers can be epitaxially deposited. Layer structures formed in this manner are advantageously suited for components of all types.
- (57) Zusammenfassung: Die Erfindung betrifft ein Verfahren zur Herstellung einer verspannten Schicht auf einem Substrat mit den Schritten: Erzeugung eines Defektbereichs in einem zu der zu verspannenden Schicht benachbarten Schicht; Relaxation mindestens einer zu der zu verspannenden Schicht benachbarten Schicht. Es können epitaktisch weitere Schichten angeordnet werden. Derartig gebildete Schichtstrukturen sind vorteilhaft geeignet für verschiedenartigste Bauelemente.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01L21/20 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) H01L Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Category ° Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Ε WO 2004/082001 A (MANTL SIEGFRIED; 1-8,10,KERNFORSCHUNGSANLAGE JUELICH (DE)) 11,13, 23 September 2004 (2004-09-23) 15,16, 18 - 30, 41,42, 47-49, 51,54, 55, 60-63, 74,76, 80-86, 88-91, 93-96 the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the 'A' document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled citation or other special reason (as specified) O' document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 22/10/2004 13 October 2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Wolff, G





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